

## SARS

7/8/03

# (Severe Acute Respiratory Syndrome)

### What is SARS?

SARS, which stands for Severe Acute Respiratory Syndrome, is a previously unknown virus that was first identified in Guangdong Province (China), Hanoi (Vietnam), and Hong Kong in March 2003. It has since spread to many countries, with hundreds of people infected.

### Where did SARS come from?

Evidence points to SARS originating in China, but investigation continues into its exact origin. Scientists are now sure that it is a virus that previously only infected animals and mutated (or changed) to a form that affects humans.

### What kind of virus is it?

Scientists believe that SARS is caused by a coronavirus, which is the family of viruses that includes the common cold. The exact make-up of the virus was recently determined by the Centers for Disease Control and Prevention (CDC) and others. Many scientists are working to develop a test for the disease and a vaccine.

### What are the symptoms of SARS?

*A suspect case is defined by:*

- A fever greater than 100.4 degrees Fahrenheit (38.0 degrees Celsius) *and*
- One or more clinical findings of respiratory illness, such as cough, shortness of breath, difficulty breathing, or bluish coloring in the fingers or lips due to lack of oxygen *and*
- Travel within 10 days of onset of symptoms to an area with documented or suspected community transmission of SARS or transit through an airport in an area with documented or suspected community transmission *or*
- Close contact within 10 days of onset of symptoms with a person known to be a suspect SARS case. Close

contact is defined as having cared for, having lived with, or having direct contact with respiratory secretions and/or body fluids of a patient known to be a suspect SARS case.

*A probable case is a suspect case with one of the following:*

- X-ray evidence of pneumonia or respiratory distress syndrome *or*
- Autopsy findings consistent with respiratory distress syndrome without an identifiable cause.

### How does SARS spread?

The principal way SARS appears to be spread is through droplet transmission, namely when someone sick with SARS coughs or sneezes droplets into the air and someone else breathes them in. It is possible that SARS can be transmitted more broadly through the air or from objects that have become contaminated.

### What is the difference between droplet and airborne transmission of viruses?

*Droplet transmission* refers to the spread of viruses contained in relatively large respiratory droplets that people project when they cough or sneeze. Because of their large size, droplets travel only a short distance (usually 3 feet or less) before they settle. Droplet transmission can occur either directly when droplets are inhaled by another person, or indirectly when droplets land on an object or surface (such as a doorknob or telephone) that are then touched by another individual. Common-cold viruses are typically spread by droplets.

*Airborne transmission* means that the virus is spread by very small respiratory aerosol particles or dust, which can be breathed in by people. Small aerosol particles can remain in the air and travel over a greater distance than larger

respiratory droplets. Examples of viruses spread through the air are influenza and measles.

### **What is the incubation period for SARS?**

The time after exposure until someone gets sick is from 2 to 10 days, with the average being 7 days.

### **How long is someone with SARS infectious to others?**

Information to date suggests that people are most likely to be infectious when they have symptoms, such as fever or cough. However, it is not known how long before or after their symptoms begin that patients with SARS might be able to transmit the disease to others.

### **Does anyone die of SARS?**

About 8% on average of the people who contract SARS die because they get a severe enough case and/or have a compromised immune system. Most people recover.

### **Who is at risk of getting SARS?**

The vast majority of people who contract SARS do so because of close contact with someone who is infected, such as those sharing a household with a SARS patient and health care workers who did not use infection control procedures while taking care of a SARS patient.

### **Is there a test to see if someone has SARS?**

No “test” is available yet for SARS; however, CDC, in collaboration with the World Health Organization and other laboratories, has developed two research tests that appear to be very promising in detecting antibodies to the new coronavirus. CDC is working to refine and share this testing capability as soon as possible with laboratories across the United States and internationally.

### **Is there a treatment for SARS?**

There is no cure or specific treatment, since cases differ in symptoms and severity, but it is recommended that patients receive the same treatment that would be used for anyone with serious community-acquired atypical pneumonia of unknown cause. This includes supportive therapy such as fluids and oxygen and in some cases antivirals.

### **What can I do to prevent getting SARS?**

The CDC recommends several precautions people can take to help prevent contracting SARS:

- Wash hands frequently with soap and hot water or with an alcohol-based hand wash;
- Cover your mouth when you cough or sneeze, then wash your hands;
- Consider postponing all unnecessary travel to regions affected by SARS;
- Avoid sharing eating utensils; and
- See a doctor if you are experiencing any of the symptoms of SARS.

### **If I think I have been exposed to SARS what should I do?**

If you think you or someone in your family might have SARS, you should:

- Consult a health care provider as soon as possible and
- Cover your mouth and nose with tissue when coughing or sneezing. If you have a surgical mask, wear it when you are around others. A mask can reduce the number of droplets coughed into the air.

For specific concerns or questions about SARS, call the New Hampshire Department of Health and Human Services, Bureau of Communicable Disease Control at 603-271-4496 or 800-852-3345 x4496. For further information, refer to the Centers for Disease Control and Prevention website at [www.cdc.gov](http://www.cdc.gov), the World Health Organization website at [www.who.org](http://www.who.org) or the New Hampshire Department of Health and Human Services website at [www.dhhs.state.nh.us](http://www.dhhs.state.nh.us).